IAP13 Rec'd PCT/PTO 22 SEP 2006

PTO-1390 (Rev. 07-2005) Approved for use through 3/31/2007. OMB 0651-0021

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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TRANSMITTAL LETTER TO THE UNITED STATES		ATTORNEY DOCKET NUMBER			
DESIGNATED/ELECTED OFFICE (DO/EO/US)		RCHP-128US			
CONCERNING A SUBMISSION UNDER 35 U.S.C. 371		U.S. APPLICATION NO. (If known, see 37 CFR 1.5)			
INTERNATIONAL APPLICATION NO.	INTERNATIONAL FILING DA	ATE	10/550,923 PRIORITY DATE CLAIMED		
PCT/US2004/009192	26 March 2004 (26		28 March 2003 (28.03.2003)		
TITLE OF INVENTION BIOMIMETIC HIERARCHIES USING FUNCTIONALIZED NANOPARTICLES AS BUILDING BLOCKS					
APPLICANT(S) FOR DO/EO/US					
SHASTRI, Venkatram P.; CHE					
Applicant herewith submits to the United Stat	tes Designated/Elected Office	e (DO/EO/US) the f	following items and other information:		
1 This is a FIRST submission of items of	-				
2. This is a SECOND or SUBSEQUENT	submission of items concerning	g a submission unde	er 35 U.S.C. 371.		
3. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.					
4. The US has been elected (Article 31).					
5. A copy of the International Application	as filed (35 U.S.C. 371(c)(2))				
a. is attached hereto (required	only if not communicated by th	e International Bure	au).		
b. has been communicated by	the International Bureau.				
c. is not required, as the application was filed in the United States Receiving Office (RO/US).					
6. An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).					
a. is attached hereto.					
b. has been previously submitted under 35 U.S.C. 154(d)(4).					
7. Amendments to the claims of the Inter	national Application under PC1	Γ Article 19 (35 U.S.	C. 371(c)(3))		
a. are attached hereto (require	ed only if not communicated by	the International Bu	reau).		
b. have been communicated b	y the International Bureau.				
c. have not been made; however, the time limit for making such amendments has NOT expired.					
d. have not been made and will not be made.					
8. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).					
9. An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).					
10. An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).					
Items 11 to 20 below concern document(s) or information included:					
11. An Information Disclosure Statement under 37 CFR 1.97 and 1.98.					
12. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.					
13. A preliminary amendment.					
14. An Application Data Sheet under 37 CFR 1.76.					
15. A substitute specification.					
16. A power of attorney and/or change of address letter.					
17. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825.					
18. A second copy of the published International Application under 35 U.S.C. 154(d)(4).					
19. A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).					

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentialty is governed by 35 US.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

PTO-1390 (Rev. 02-2005)
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U.S. APPLICATION 10/	NO. (If known, see /550,923	37 CFR 1.5)	PCT/US2004/0		ATTORNEY DOCKET NUMBER RCHP-128US	
Copy of	38 for Extension	ion of Missing	g Requirements			
The following fees have been submitted			CALCULATIONS	PTO USE ONLY		
21. Basic national fee (37 CFR 1.492(a))			\$			
22. Examination Fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)\$0 All other situations				\$		
23. Search Fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the International preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)\$0 Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Search Authority					\$	
		TOTAL OF 21,	22 and 23 =	_	\$	
Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing filed in an electronic medium). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.						
Total Sheets	Extra Sheets	Sheets Number of each additional 50 or fraction thereof (round up to a whole number)				
- 100 =	/50 =	x \$250		\$		
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h))					\$ 130	
CLAIMS	NUMBER FILED NUMBER EXTRA RATE					
Total Claims		- 20 =		× \$50	\$	
Independent Claim	s	- 3 =		x \$200	\$	
MULTIPLE DEPENDENT CLAIM(S) (if applicable) + \$360				\$		
			TOTAL OF ABOV	E CALCULATIONS =	\$	
Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½.			\$ 65			
				SUBTOTAL =	\$ 65	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).			\$			
			тоти	L NATIONAL FEE =	\$ 65	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property			\$ 80			
OTHER FEES: Petition for Extension of Time			\$ 225			
27/2006 LLANDGRA 00000046 10550923 TOTAL FEES ENCLOSED =				\$ 370		
FC:2617		65.00 OP			Amount to be refunded:	\$
					Amount to be charged	\$

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PTO-1390 (Rev. 02-2005)

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U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. A check in the amount of \$ ___ to cover the above fees is enclosed. a. b. Please charge my Deposit Account No. in the amount of \$__ to cover the above fees. A duplicate copy of this sheet is enclosed. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit C. Account No. 18-0350. A duplicate copy of this sheet is enclosed. [X] Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status. SEND ALL CORRESPONDENCE TO: 23122 Customer Number OR loy Mulholland NAME RatnerPrestia, P.O. Box 980, Valley Forge, PA 19482 <u>47,810</u> RatnerPrestia, P.O. Box 1596, Wilmington, DE 19899 REGISTRATION NUMBER September 22, 2006 Date:

·	,				
CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)				Docket No.	
Applicant(s): Venkatram P. Shastri et al.			RCHP-128US		
Serial No.	Filing Date	Examiner		Group Art Unit	
10/550,923	Herewith			·	
Invention: BIOMIMETIC I BLOCKS	HIERARCHIES USING FUN	ICTIONALIZED NANOPAF	RTICLES	S AS BUILDING	
I hereby certify that the fo Response to Notification indicated therein as be	on of Missing Requirements	(with Form PTO-1390 and	all of th	e documents	
	(Identify type	of correspondence)			
CFR 1.10 in an envelope Mail Stop PCT,	ne United States Postal Service addressed to: s, P.O. Box 1450, Alexandria, '	·	Address	ee" service under 37	
		Amanda Kelly (Typed or Printed Name of Signature of Pers	K-c	lly	
		EV 579430144 US ("Express Mail	l" Mailing l	Label Number)	
Note: Each paper must have its own certificate of mailing.					





United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address. COMMISSIONER FOR PATENTS Do Not 1450 Alexandra, Viginia 22313-1450 www.usplo.gov

U.S. APPLICATION NUMBER NO. FIRST NAMED APPLICANT ATTY. DOCKET NO. 10/550,923 T1118/20090

Venkatram P Shastri

INTERNATIONAL APPLICATION NO. PCT/US04/09192 I.A. FILING DATE PRIORITY DATE

03/26/2004

03/28/2003

3000 CAESAR, RIVISE, BERNSTEIN, COHEN & POKOTILOW, LTD. 11TH FLOOR, SEVEN PENN CENTER 1635 MARKET STREET PHILADELPHIA, PA 19103-2212

CAESAR RIVISE BERNSTEIN COHEN'S BUKUTION ITD

CONFIRMATION NO. 4606 371 FORMALITIES LETTER *OC000000018917751*

Date Mailed: 05/24/2006

NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Indication of Small Entity Status
- Copy of the International Application filed on 09/28/2005
- Copy of the International Search Report filed on 09/28/2005
- U.S. Basic National Fees filed on 09/28/2005
- Priority Documents filed on 09/28/2005

The applicant needs to satisfy supplemental fees problems indicated below.

The following items MUST be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.
- To avoid abandonment, a surcharge (for late submission of filing fee, search fee, examination fee or oath or declaration) as set forth in 37 CFR 1.492(h) of \$65 for a small entity in compliance with 37 CFR 1.27. must be submitted with the missing items identified in this letter.

SUMMARY OF FEES DUE:

Total additional fees required for this application is \$65 for a Small Entity:

\$65 Surcharge.

ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION.





WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.

The time period-set above may be extended by filing a petition and fee for extension of time under the provisions of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

A copy of this notice MUST be returned with the response.

ANITA D JOHNSON

Telephone: (703) 308-9140 EXT 226

PART 1 - ATTORNEY/APPLICANT COPY

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U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/550,923	PCT/US04/09192	T1118/20090

FORM PCT/DO/EO/905 (371 Formalities Notice)